

Exceptional dates for British Orthoptera

Exceptionally late dates for British Orthoptera were reviewed by Haes (1974; 1980) who recorded many of our native species as late as November and some as late as early December. All of these extremely late records relate to the survival of small numbers of insects in unusually mild areas in the south and west. In inland areas, Orthoptera seldom survive far into November. In 1993, for example, autumn in Oxfordshire was typical with a significant number of frosty nights in October. *Pholidoptera griseoptera* (De Geer) was heard in good numbers at Headington on 19.x.1993 but searches at the same site in early November were fruitless. In cool autumn weather, Orthoptera are barely active and difficult to find. On 2.xi.1993, in the company of Mr E.C.M. Haes, careful searching revealed two female *Gomphocerippus rufus* (L.) on downland near Goring, Oxfordshire and three female *Omocestus rufipes* Zetterstadt and two male *Chorthippus brunneus* (Thunberg) among leaf litter in Bagley Wood near Oxford. These are late dates for an inland county. The very mild, humid autumn of 1994 was not particularly suitable for the prolonged survival of grasshoppers but was ideal for the bush-cricket *Pholidoptera griseoptera*. About six males were heard on a sheltered bank in Headington on 19.xi and a single male was heard on 21.xi.1994, which is exceptionally late for Oxfordshire. A single male was heard in a nettle-bed in Glamorgan on 23.xi.1994 and this insect probably survived even later in coastal counties in 1994.

Apart from species that overwinter as adults or nymphs it is unusual to find mature Orthoptera before the middle of June. *Omocestus viridulus* (L.) is the first species to mature and the most likely grasshopper to be heard in early June. After a very mild winter and warm spring, adult male and female *O. viridulus* were found in the New Forest on 26.v.1990. However, a visit to the Somerset Levels on 28.v.1990 was truly exceptional. Both *O. viridulus* and *Chorthippus parallelus* (Zetterstadt) were adult and calling in large numbers at Street Heath. A few male *C. brunneus* were adult and stridulating also. The scene was somewhat unreal for an English May; a heat-haze rising off the peat moors, the loud chorus of scores of grasshoppers, one Marsh Fritillary, *Eurodryas aurinia* (Rottemburg) already well-worn and pairs of Meadow Browns, *Maniola jurtina* (L.) performing courtship rituals in woodland shade.

Insects and in particular the relatively long-lived Orthoptera are sensitive indicators of climatic variation. There may be more than just curiosity value in the recording of exceptional dates for Orthoptera. More systematic monitoring of their dates of maturation and survival may provide valuable data for studying the effects of climate on insect populations and such data collected long-term may provide evidence of climatic change.

References: Haes, E.C.M., 1974. Late records of native Orthoptera. *Entomologist's Gazette*. **25**: 200-203; Haes, E.C.M., 1980. Late Orthoptera records in West Sussex 1979. *Entomologist's Rec. J. Var.* **92**: 191.

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